



AIM Summer Academy 2019 – July 22-26, MIT
Integrated Photonics: Fundamentals, Applications and Implementation
PIC Fundamentals Education Track

	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	8-8:50 AM Registration, Welcome S. Saini L.C. Kimerling	8-8:30 PM AIM PDK & MPW E. Timurdogan			
	9-10 AM Photonics Fundamentals L.C. Kimerling	8:30-10:20 AM Integrated Photonics: Active Devices J. Liu	8:30-10:45 AM PICs: Fabless Silicon Photonics Design Flow S. Preble	8:30-10:45 AM PIC Fabrication: Process Variation and Design for Manufacturing D. Boning	8:30-11:20 AM Design Presentations
	10-12 PM Integrated Photonics: Passive Devices J.J. Hu	10:30-12 PM Integrated Photonics: Chip Process Flow L.C. Kimerling	11-12 PM EPDA Tool Overview Synopsys Mentor	11-11:30 AM EPDA Tool Overview Mentor	Student Teams' Design Project Review
				11:30-12 PM AIM TAP Facility E. White	11:30-12:30 PM Conclusion - Education/Workforce - IPSR Roadmap L.C. Kimerling
Afternoon	Lunch 12-1 PM			Group Photo Lunch 12:10-1 PM	
	1-2 PM EPDA Tool Overview Synopsys Lumerical	1-2 PM EPDA Tool Overview Synopsys Lumerical	1-2:20 PM Integrated Photonics Application: AR Imaging M. Zirngibl	1-2:20 PM Integrated Photonics Application: Sensing B. Miller	
	2-3:20 PM Integrated Photonics Application: Datacom M. Glick	2-3:20 Integrated Photonics Application: Wireless D. Prather	2:30-3:50 PM PIC Optical & Electrical Testing J. Cardenas	2:30-3:50 PM PIC Packaging S. Preble	
	3:30-4 PM Virtual Design Workshop E. Verlage	3:30-4:15 PM Coventor Workshop M. Hargrove	4-5:45 PM Design Team Breakout Session	4-6 PM Design Team Breakout Session	
	4-6 PM Design Team Breakout Session <u>Define Problem</u> - Systems constraints - Figure of Merit	4:30-6 PM Design Team Breakout Session <u>Select Components</u> - Analog, Digital	<u>Plan Circuit Layout</u> - Performance - Layout constraints	<u>Finalize Design</u> - process integration	
Evening			6-8 PM Networking Dinner (Catalyst Restaurant / Tech Square)		